Domestication analyses and the smartphone

Introduction

The chapter considers the different forms that domestication studies of smartphones might take. It first examines how domestication analysis has itself evolved over time in the hands of different researchers, implying that a range of different analyses using this framework could be applied to the smartphone. It then explores the issue of how different ways of understanding the smartphone can lead to different objects of study. Domestication studies of the early mobile phone demonstrate this principle. Finally, the chapter examines how domestication analysis might vary in terms of who is using, or influencing the use of, the device through considering two empirical smartphone studies, one of older children (9-16) and one of pre-school children (0-5).

Domestication

Drawing on media studies and consumption studies, the domestication framework was first formulated to examine the processes by which people fitted information and communication technologies (ICTs) into their lives and to make sense of how they used them (Silverstone et al., 1992[1]). It looks at user agency and meaning-making, but takes into account outside influences, for example, negotiating with and having an awareness of others.

Rather than considering all the more prominent processes outlined in the original formulation of domestication, the focus in this section is on those that will be particularly relevant for the case studies discussed later in this chapter. One process related to how people used ICTs but also, in particular, how they fitted these technologies into their temporal routines, why they used them at certain times (incorporation). In the earliest studies of ICTs in the home, another issue was how the devices were located in space, where and why they were placed in certain domestic spaces (objectification). Yet these very same examples illustrate how researchers in this tradition were taking into account the rest of people's lives when making sense of their ICT choices: here the organization of their time (school time, work time and time commitments to children, to caring for others, to social networks) and the constraints of the physical organization of space and it symbolic meanings (e.g. why the work computer might look 'out of place' in the living room – Ling and Thrane, 2001). But there were always other considerations shaping ICTs that were not to the forefront in that classic formulation of the approach but that were nevertheless explored in empirical studies, such as people's general financial circumstances (Haddon, 2000; more recently and acutely demonstrated in Mwithia's (2016) study of how life in a Nairobi slum shaped mobile phone use and in Hahn and Kibora's (2008) study of poor people's use of mobile phone in Burkina Faso).

Over the years, reviews of domestication research have observed how various studies and commentaries have added to this body of work (Becker et al., 2006; Haddon, 2006, 2011, 2016) and even Roger Silverstone, who led the team first formulating this framework, noted: '*All*

concepts, once having gained the light of day, take on a life of their own. Domestication is no exception' (2005: 229).

Hence, the domestication approach has evolved as writers considered the nature of the framework, its limitations, but by implication what it could be expanded to cover. For example, it has been argued there could be more research on people's different perceptions of content conveyed through ICTs that was of interest to some of those formulating the original domestication concept (e.g. Hartmann, 2006; Bertel, 2018; this aspect was later followed up in Sørensen's (2014) examination of the domestication of Disney products). Or we might ask more about the consequences of domesticating ICTs, for example, exploring the ways in which users might be empowered by these technologies (Bakardjieva, 2006) or how the adoption of ICTs might result in users changing their behavior (Haddon, 2011; Blank and Dutton, 2015). Very soon after the early formulation of domestication, some researchers were already considering the experience of ICTs in locations outside the home (Håpnes, 1996 on computer clubs; Hynes and Rommes, 2006 on introductory internet courses). Later, attention was given to cultural influences, how domestication processes can take on particular inflections because of the circumstances in different countries (Lim, 2006, on China; Lim and Soon, 2010, on China and Korea). Others have looked at the wider social discourses in which people make sense of the world and use ICTs (Hartmann, 2013), as when the social construction of concerns about children influenced parental decisions (Mascheroni, 2014). One more dimension that can be considered is previous generational experiences that have a bearing on how people understand and use ICTs now (Haddon, 2017a). Thus, over and above applying domestication analysis to new technologies the analytical possibilities are themselves evolving as domestication researchers explore a range of questions that can be asked and the different ways of framing a topic, in part reflecting the variety of contexts - location of use, culture, generational experience – that they wish to consider.

Domestication of the mobile phone

Before turning to smartphone, we can already see the variation among domestication studies that had looked at its precursor, the mobile phone, especially as that device started to take on more functions. One early work asking what a domestication analysis of the mobile phone might look like noted that the portability of this ICT provoked new questions about ICT experiences outside the home, the 'classic' site address by this framework (Haddon, 2003). For example, this could entail asking questions about interactions with social networks members, not just family members, about norms in different public spaces (the counterpart to rules in the home), and the symbolic meaning of displaying and using the devices in settings outside the home.

Meanwhile, some domestication studies considered how different (national) cultural settings played a role in shaping the meaning of this mobile technology (Yoon, 2003; Hahn and Kibora, 2008; Hijazi-Omari and Rivka, 2008; Wong, 2010; Bolin, 2010; Cooper, 2016; Mwithia, 2016). And there was one example of using the case of the mobile phone to explore whether a particular element within domestication analysis, the 'moral economy' can itself be expanded to take into account emotions attached to this technology (Schofield-Clarke, 2014).

In the early mobile phone literature, mobile phones were used principally for communication. But the addition of cameras, sound recording and music playing facilities meant that the mobile phone was already starting to look like a mobile media player, a stepping stone to the modern smartphone. This increasing polysemy of the device, the greater range of social activities into which it could be integrated, meant that more new questions could be asked about how each of these extra features could in themselves be domesticated (e.g. Scifo, 2005, on the camera phone

- i.e. the camera on the mobile phone - in Italy, and Haddon and Vincent, 2009 on children's use of these additional features in the UK).

Lastly, the WAP protocol brought the internet onto mobile phones, although in the light of the subsequent enthusiastic take up of smartphones, this version of the mobile internet was generally not considered successful, even if the Japanese equivalent, I-Mode, fared somewhat better (Goggin, 2006). Amongst other things, a study of children's use found that the high cost of access was one factor at this stage that deterred use (Haddon and Vincent, 2009). However, putting aside the details of WAP and I-Mode, the principle of having the internet on mobile phones in some form meant that one could at least begin to ask what form a domestication analysis of this dimension might take, what questions could be asked (as demonstrated in Green & Haddon, 2009).

Domestication of the smartphone

The form of any domestication analysis of the smartphone in part depends on how the technology is framed, how it is characterized. For example, discussing the smartphone as 'mobile media' can draw attention to the media elements (although Goggin and Hjorth, 2014, manage to use that term in a very broad way). Thinking of the smartphone as enabling the 'mobile internet' draws attention to all things internet-related about the device. While, conceptualizing it as a 'platform' perhaps evokes the "Swiss-army knife" metaphor, and may sensitize researchers to think more about apps. Even the word 'mobile' has connotations, suggesting we consider its use in different locations outside the home, when in fact 'at hand' is equally appropriate good characterization of the device given that sometimes the smartphone is used as a more convenient alternative to the PC, laptop or tablet in the home.

To reflect further on the object of study (and expand an argument first developed in Haddon, 2011) early domestication studies from the 1990s had often focused on (hardware) technologies like the TV, computer and mobile phone. That does not rule out examining the smartphone as an equivalent technology, as will be demonstrated in the case studies below. But the focus could equally well be narrowed to specific elements of the smartphone, such as Bertel's (2016, 2018) studies of geolocation apps – given that geolocation was a topic in its own right just as before the smartphone there was a sub-literature on the camera phone within mobile phone studies. In the first of these studies (Bertel, 2016), school students where positive about the smartphone in general, but rejected the 'check-in' app. In the second study (Bertel, 2018), one girl who used to regularly get lost on the way to meetings with peers and who had had to phone them up asking for directions was delighted with the map app on her phone because it avoided that embarrassment. This particular example illustrates not only little ways in which ICT use can be empowering, but highlights the importance of interaction with social networks outside the home.

If the object of study is some app or some functionality, one question is how much is new and how much builds upon what has gone before, as various writers have noted (e.g. Goggin and Hjorth, 2014). Some apps on the smartphone, such as the location ones, did not have counterparts on mobile phones. But, pictures taken even on the oldest mobile camera phones could later be transferred to a computer and posted on the internet, even if that process is now much quicker with the smartphone. Meanwhile, people have been accessing social networking sites for some years, but the smartphone enables portable access. When there are precursors, as in the case of ICTs more generally, this in turn raises questions of whether some practices have been displaced, managed in another way, or whether some technological options are complementary to others (i.e. using one technology to achieve a goal in one circumstance but another ICT under different conditions).

Moreover, like studies of ICTs more generally, domestication studies usually focus on the experiences of particular groups in society. In principle, this can be in terms of age/stage of life (e.g. domestication by young single adults, couples, families with children, younger older people/recently retired or older older people). For each of these, their current circumstances could affect the domestication process, but so too could the generational effects noted earlier in the chapter (what experiences, including familiarity with technology, users of smartphones had had earlier in life). Such studies might have research agendas relating to transitions (e.g. to adulthood, to retirement, to old age), examining how people react to new situations, what strategies they use to cope and whether technologies like smartphones play a part in these practices. But there could be other rationales for choosing who to focus upon such as various 'minorities' by gender, ethnicity, sexual orientation, or groups sharing other common experiences such as the unemployed or diaspora (Bakardjieva, 2005). The latter example might imply more specific questions, for example, about moving to a new country (another type of transition) and the place of ICTs within strategies to cope with this change (e.g. Pavez-Andonaegui, 2014). Or the focus may not be so much on who is domesticating ICTs but on where it is taking place, such as in SMEs (Pierson, 2006; Harwood, 2011) on a university campus (Vuojärvi et al. 2010) Indeed there is already one study of the smartphone's domestication in an educational setting (Koskinen, 2012). In general, while the potential to focus on different users and contexts it is not unique to smartphone analysis, it is worth remembering that it also applies to the smartphone since it has a bearing upon the research questions asked.

Following on from the early overview of the literature in this chapter, domestication studies of the smartphone might cover cultural specificities, the extent to which practices reflect roles and issues that have been discursively constructed, whether that domestication of smartphones or apps is empowering and what changes this makes to users lives. Clearly, when asking what a domestication analysis of smartphones looks like there are multiple possibilities, with more to come as both the smartphone and the domestication literature evolve.

Two case studies

Amongst all the possible domestication analyses, the next section provides two case studies to illustrate briefly how specific themes can be explored using domestication questions. Both are studies of families with children, but it will be clear that the age of the children makes a difference.

The first case study comes from the *Net Children Go Mobile*[2] research on 9-16 year olds' use of smartphones and tablets, an EC funded study prompted by concerns about online risks through accessing the internet via portable devices (for more details, see Haddon and Vincent, 2015). The difference in emphasis from many earlier studies of domestication in families with children is that here the focus was on the children's perspectives – they were the main interviewees, although focus groups of parents were also undertaken. Only the results from the UK study are reported in this chapter, in which 38 children took part (Haddon, 2018).

The second case study was from the Australia-UK *Toddlers and Tablets* project looking at how younger children aged 0-5 experienced touchscreens (for more details see Haddon and Holloway, 2018). In practice, this research was mainly looking at both tablets and smartphones, but many of the children's activities, sometimes using the same apps, took place on both devices. Given the children's ages, this research was mostly based on interviews with parents. But the children were recorded on video using the devices and use was discussed with the parents and indeed with the children where the latter were old enough to talk. There was a total of nine UK families (plus a pilot study) and two focus groups

Case study one: The domestication of smartphones in families with older children

Adults in general experience some external constraints on their use of technologies like smartphones – for example, in terms of rules about using smartphones, or indeed any phone, for personal purposes at work. But it was very clear that these children, or given their age these 'young people', experience more constraints, from parents but also from other adults The focus of this particular analysis on these constraints, rather than other possible elements of children's domestication, was intended to reflect more critically on years of celebratory claims about children being 'digital natives' free to explore the possibilities of technologies (Prensky, 2001; but among many other critics, see Stern, 2008; Selwyn, 2009).

Financial constraints were important, even in the decision to acquire this technology, given that parents were often worried that their children might break or lose what were expensive devices, more costly than simple mobile phones. Hence, one negotiation was around the age when children were deemed responsible enough to have a smartphone. Cost considerations often influenced which model the children were allowed to have – sometimes not the more expensive, fashionable ones that some children desired. But constraints extended beyond that to what the children could download – where there was pressure to seek parental permission first and preferably stick to free downloads if the parents were paying. Then there were running costs, and parental requirements that these should not go over certain limits – hence advice that children should avoid streaming video on the devices, because that could run up bills. On the whole, while the children made some mistakes that led to an unexpectedly high bill, most of them had clearly become cost conscious and were careful. That meant and sometimes explored cheaper ways - 'workarounds' - of achieving goals with these devices, such as searching for free WiFi spots or seeking out free options (e.g. free online news). Nevertheless, the financial constraints meant that while children used smartphones, sometimes with creativity, they still did so within limitations.

Money was not the only consideration – there were other rules about children's use of smartphones. For example, there were school rules about use, whether thinking of school as a particular social space or thinking about school time. To stand back and look at the European results, these varied within and between countries (Mascheroni and Ólafsson, 2014). In Denmark, for instance, it was more common to allow use outside of lessons and sometimes children were even allowed to make use of the school WiFi. But the UK was among a number of countries where any use was often prohibited in school, depending on the policy of the particular school. That does not mean that children never used their smartphones at school, but the children had to be circumspect or else their devices could be confiscated. In addition, both teachers and parents often advised children to be very careful about using the smartphone visibly in various public spaces, for fear that the devices might be stolen. As a result of this, many of these children were very careful, for example, not using their smartphones on buses or when walking along the street.

Then there were the rules about use in the home. Some of these were the same as would have previously applied to mobile phones or internet use, about total time spent using such technologies. As is clear from the parental mediation literature more generally, parents often tried to find a balance in their children's lives, between using technologies, school commitments but also other things such as playing sports and socializing face to face with peers to develop social skills. Hence, there were parental worries about too much use of smartphones. This was probably enhanced compared to mobile phones because of their extra functionality and social media access could make smartphones particularly 'addictive' from the parents' perspective. In addition, there were sometimes rules about the timing of use – e.g. not using the devices during meals, or other family times (sometimes holidays for example) or when

relatives were visiting because using the phone then would be considered especially anti-social. But beyond such general time rules, there were those rules arising specifically from the online risk agenda (Mascheroni and Haddon, 2015), since the smartphone gave children more access to the internet and indeed did so in a way that meant many parents felt it was more difficult to monitor that use on portable devices. Hence all the rules about internet use in general – e.g. not talking to strangers, being careful about social media use, what types of content children could and could not look up - applied to the smartphone as well. Of course, such rules were not always abided by and conflicts sometimes arose, particularly with older children, when parents tried to check the browser histories on children's smartphones (Haddon, 2015)

In sum, this section has considered various factors explored in domestication analysis – financial considerations, times and spaces, parental values – in order to focus on some of the constraints under which children operated, and which have a bearing on their use of smartphones. It illustrates how a domestication analysis can address a particular issue, constraints, and not necessarily cover all possible domestication processes. That said, a broader domestication analysis of the place of smartphones in these children's lives would cover additional dimensions (and some of these have been developed in another publication arising from this study - e.g. Haddon, 2017b). For example, many of the children were quite positive about the devices and used a range of apps. In particular, the children often pointed out how social media via the smartphone helped them to be more sociable, and certainly increased their awareness of what peers were doing. On the other hand, they could sometimes be as critical as adults, noting that it was very time-demanding and sometimes distracting to use the devices to monitor what was happening in their social networks, especially when they felt they might miss out socially and be excluded if they did not make an effort to do so. And some parents might be surprised to know that children could also be critical of their peers' inappropriate use at certain times - e.g. if some children were on their smartphones when the social occasion was such that other children co-present felt they should interacting face-to-face. In other words, apart from all the constraints, the children were active agents, evaluating the technology and its role in their life, making decisions about when it was appropriate to use smartphones and when not – all part of their domestication of the technology.

Case study two: The domestication of smartphones in families with younger children

Even young children, certainly by 18 months, can exhibit some agency in terms of deciding when they would like to use devices and what they would like to do on them – playing games, playing with educational puzzles, of watching YouTube videos being the most common activities. But compared to the older children in the first case study, the role of technologies in their lives was much more determined by the parents. There was some overlap with the concerns of parents of older children in terms of finding a balance in the children's activities, so once again there were time limits imposed on the use of tablets and smartphones. And apart from dealing with occasional tantrums, these parents of younger children were better able to control the children's use for a variety of reasons. These children often had temporal routines that filled much of their lives, such as rituals around getting up and going to bed, mealtimes, evening baths, going to nurseries or play groups – which often meant the organization of their schedules left limited time for using technologies simply because they were doing other things. In addition, if the tablet or smartphone was removed from sight, the younger children especially, aged one or two, forgot about them. And most of the children had a variety of interests only one of which was using technologies, so controlling what might be perceived as overuse rarely became an issue.

As noted above, the online risk agenda associated with older children's use was not so much of an issue for the parents of younger children. This was largely because younger children in

this age group needed the parents' help in order to achieve anything and even the slightly older ones aged four and five often had problems and got stuck (e.g. they could not navigate back to where they wanted to be) and so regularly called upon their parents (or siblings) to help them out. Hence, the parents tended to know what the children were doing on the devices at any one time, they were often nearby anyway, and many parents had set up some controls on the devices so that, for example, the children only accessed *Kids YouTube*.

In contrast to parents of older children, the early learning agenda was more prominent, as these 'new' parents tried to work out the best way to bring up children – albeit influenced by wider discourses on this topic as they read about parenting or went online to hear what other parents said. This reminds us that the experience of parenting itself changes over time, both in terms of their parents' use of (and confidence in) the digital world, but also in terms of increasing pressures to be reflexive about their own parenting.

The learning agenda noted above could give rise to concerns because the parents were worried that ICT use was displacing what some parents considered to be more stimulating, imagination provoking non-technological activities such as playing outdoors, playing with other children or playing with physical objects like toys. On the other hand, parents could be more positive that the devices might actually be supporting their children's learning in various ways: e.g. helping the children to learn about language, to learn about numbers, shapes or things about the world in general (e.g. learning about animals, nursery rhymes, classical music, potty training and appreciating cultural practices like birthdays). These were not mutually exclusive views – some parents saw both sides, some who still had concerns had at least come to perceive that various forms of learning through using the devices were taking place.

At times, parents not only allowed the use of the smartphone or tablet for such learning purposes, but supported it by downloading the appropriate apps to devices. Many engaged, to greater and lesser degrees, with their children's use, in terms of asking them what they were seeing, what they should do next to progress, why they were stuck, what they liked about the apps, etc. To use the terms of the parental mediation literature, there was much more 'co-use' than with older children (Zaman et al, 2016), while to use terms from the early learning literature, there was much more parental 'scaffolding' of children's learning (Stephen et al, 2013).

Finally, there was one role that smartphones and tablets played that was really the initiative of the parents and very much on their behalf, not primarily related to the child's learning. This was using the devices to occupy or distract young children. For example, when some children would eat little food the smartphone was used to distract them while they ate something. Showing one child family photos on the device could calm him down when he woke with nightmares. In general, one common way that these children seem to have been first introduced to smartphones, in particular, was on long journeys, either in the car or on flights, to keep them busy. And most parents noted that there were times when they gave the child the device so that the parent could attend to other activities, like cooking or studying, or on visits to the doctors. In fact, this sometimes produced considerable ambivalence in parents, when they talked about how using the smartphone as an 'electronic babysitter' in this way could have a stigma attached – especially when they were visible to other adults in public spaces. Hence, some said they only used it like this 'in emergencies', or when they had to calm the children down in a public place and the smartphone was always easily at hand for that purpose (e.g. compared to carrying crayons and paper).

Compared to the case study of older children, there are more limits on these younger children's agency, the parents have somewhat different goals for their children and there are differences

in how parents are able to manage their ICT use. If domestication is interested in how people find a place for ICTs in their lives, here we see how parents are trying to both control and support the role of technologies like smartphones in their children's lives, although in the case of occupying that child the technology was used to the benefit of the parent.

Conclusions

This chapter has demonstrated some of the principles in the body of literature looking at domestication, indicating it is a constant work in progress. Many researchers move beyond the classic formulation and early studies to consider new foci and dimensions, enabling a range of different types of domestication analyses. Some of these are illustrated in relation to the precursor to the smartphone, by looking at domestication studies of the mobile phone.

The smartphone itself is clearly very multifunctional and can be framed in broadly different ways (e.g. mobile media, mobile internet) that can produce a variety of domestication analysis with different emphasis and different objects of studies. The possibilities are amplified when considering the various different potential users, and possible agendas associated with them. Some of these possibilities are indicated in Figure 1, where the examples given are not mutually exclusive.

Figure 1: Bases for different types of domestication analysis of the smartphone

Questions	Examples
Who is primarily researched	Older children, parents of younger children
Who is interacting	Parents-children, peers
Location	In the home, another location, on the move
Background considerations	Cultural influences, previous/changing generational experiences, wider social discourses
Emphasis within the domestication framework	Constraints on use/fitting smartphones into everyday life, consequences of use (e.g. empowerment, change in behavior/use of other ICTs)
Framing of the smartphone	Mobile media, mobile internet, platform
Level of focus	Smartphone, app, content on smartphone
Particular issues addressed	Claims about digital natives, comparing parents of older and young children

Lastly, the two case studies illustrate the diverse ways in which a domestication approach might look at the smartphone. While both studies examined children, there were many differences because of the age (and hence capabilities) of the children and the related different parental concerns (and in the case of younger children, aspirations). But the case studies also show some elements of the classic formulation of domestication and related empirical studies, contexts like (parental) value systems, the organization of (children's) time and the financial limitations in families. Meanwhile, more generally they show young people playing an active role in finding a place for technology in their lives, or in these case studies parents trying to influence, sometimes encourage, sometimes limit, the place of this smartphone technology in their children's lives.

References

Bakardjieva, Maria. 2005. *Internet society. The internet in everyday life.* London: Sage.

Bakardjieva, Maria. 2006. "Domestication running wild. From the moral economy of the household to the mores of culture. In *Domestication of media and technologies,* edited by T. Berker, M. Hartmann, Y. Punie & K. Ward, 62-79. Maidenhead: Open University Press.

Berker, Thomas., Hartmann, Maren., Punie, Yves., and Ward, Katie (eds) 2006. *Domestication of media and technologies*. Maidenhead: Open University Press.

Bertel, Troels. (2016) "Why would you want to know? The reluctant use of location sharing via check-ins on Facebook among Danish youth." *Convergence: The International Journal of Research into New Media Technologies* 22, no 2: 162–176.

Bertel, Troels. 2018. "Domesticating Smartphones". In *Smartphone cultures,* edited by J. Vincent and L. Haddon (pp.83-94). Abingdon: Routledge.

Blank, G. and Dutton, W. 2015. "Next generation users: Changing access to the internet." In *The ubiquitous internet: User and industry perspectives,* edited by A. Beckman & S. Lomborg, 1-34. London: Routledge.

Bolin, G. 2010. "Domesticating the mobile in Estonia." *New Media and Society* 12, no 1: 55-74.

Cooper, Carol. 2016. *Going mobile: The domestication of the cell phone by teens in a rural East Texas town*. PhD diss., University of Loughborough, Loughborough, UK

Goggin, Gerard. 2006. *Cell phone culture: Mobile technology in everyday life.* London: Routledge.

Goggin, Gerard and Hjorth, Larissa (eds). 2014 *The Routledge companion to mobile media*, Abingdon: Routledge.

Green, Nicola and Haddon, Leslie. 2009. *Mobile communications. An introduction to new media,* Oxford.: Berg.

Haddon, Leslie. 2000. "Social exclusion and information and communication technologies: Lessons from studies of single parents and the young elderly." *New Media and Society* 2, no 4: 387-406.

Haddon, Leslie. 2003. "Domestication and mobile Telephony." In M*achines that become Us: The social context of personal communication technology,* edited by J. Katz, pp.43-56. New Brunswick: Transaction Publishers. http://eprints.lse.ac.uk/64825/

Haddon, Leslie. 2006. "The contribution of domestication research to in-home computing and media consumption." *The Information Society,* 22: 195-203. http://eprints.lse.ac.uk/62631/

Haddon, Leslie. 2011. "Domestication analysis, objects of study, and the centrality of technologies in everyday life." *Canadian Journal of Communication,* 36: 311-323. http://eprints.lse.ac.uk/62128/

Haddon, Leslie. (2015). "Children's critical evaluation of parental mediation." *Cyberpsychology: Journal of Psychosocial Research on Cyberspace,* 9, no.1 (May) http://eprints.lse.ac.uk/63261/

Haddon, Leslie. 2016. "Domestication and the Media." In *The International Encyclopedia about Media Effects* Vol.1, edited by P. Rössler, 409-417. London: Wiley and Sons. http://eprints.lse.ac.uk/64848/

Haddon, Leslie. 2017a. "Generational analysis of people's experience of ICTs." *Digital technologies and generational identity: ICT usage across the life course,* edited by In S. Taipale, T-A. Wilska, & C. Gilleard, 37-51. Abingdon, Oxford: Routledge, http://eprints.lse.ac.uk/68534/

Haddon, Leslie. 2017b. "Sociability, smartphones and tablets." In *Between the public and private in mobile communications,* edited by A. Serrano Tellería, pp.243-261. Oxford: Routledge. http://eprints.lse.ac.uk/62125/

Haddon, Leslie. (2018) "Domestication and social constraints on ICT use: Children's engagement with smartphones." In *Smartphone cultures,* edited by J. Vincent and L. Haddon, 71-82. Abingdon: Routledge.

Haddon, Leslie and Holloway, Donell. 2018. "Parental evaluations of young children's touchscreen technologies." In *Digital parenting: The challenges for families in the digital age*, edited by G. Mascheroni, C. Ponte, and A. Jorge, 113-124. Gothenburg: Nordicom.

Haddon, Leslie and Vincent, Jane. 2009. "Children's broadening use of mobile phones." In *Mobile technologies: From telecommunications to media,* edited by G. Goggin and L. Hjorth, 37-49. London: Routledge. http://eprints.lse.ac.uk/67594/

Haddon, Leslie and Vincent, Jane (2015). *UK children's experience of smartphones and tablets: Perspectives from children, parents and teachers*. The London School of Economics and Political Science, London, UK: Net Children Go Mobile. http://eprints.lse.ac.uk/62125/

Hahn, Han Peter and Kibora, Ludovic. 2008. "The domestication of the mobile phone: Oral society and new ICT in Burkina Faso." *The Journal of Modern African Studies*, 46, no.1, 87-109.

Håpnes, T. (1996) "'Not in their machines'. How hackers transform computers into subcultural artefacts." In *Making technologies our own? Domesticating technology into everyday life,* edited by M. Lie and K. Sørensen, 121-150). Oslo: Scandinavian University Press..

Hartmann, Maren. (2006) "The triple articulation of ICT. Media as technological objects, symbolic environments and individual texts." In *Domestication of media and technologies,* edited by T. Berker, M. Hartmann, Y. Punie and K. Ward, 80-102. Maidenhead: Open University Press.

Hartmann, Maren. 2013, "From domestication to mediated mobilism." *Mobile Media & Communication* 1, no.1: 42-49.

Harwood, S. A. 2011. "The domestication of online technologies by smaller businesses and the 'busy day'." *Information and Organization* 21, no.2: 84–106.

Hijazi-Omari, H. and Rivka, R. 2008. "Playing with fire: On the domestication of the mobile phone among Palestinian teenage girls in Israel." *Information, Communication and Society*, 12, no.2:149-66.

Hynes, Deidre. & Rommes, Els. 2006. "'Fitting the internet into our lives': IT courses for disadvantaged users." In *Domestication of Media and Technologies,* edited by T. Berker, M. Hartmann, Y. Punie and K. Ward, 123-44. Maidenhead: Open University Press.

Koskinen, I. 2012. "How a university domesticated the iPhone." In *Studying mobile media: Cultural technologies, mobile communications and the iPhone,* edited by L. Hjorth, J. Burgess and I. Richardson, 229-240. Abingdon: Routledge.

Lim, Sun Sun 2006. "From cultural to information revolution: ICT Domestication by middle-Class Chinese families." In *Domestication of media and technologies,* edited by T. Berker, M. Hartmann, Y. Punie and K. Ward, 185-204. Maidenhead: Open University Press.

Lim, S-S and Soon, Carol. 2010. "The influence of social and cultural factors on mother's domestication of household ICTs - Experiences of Chinese and Korean women." *Telematics and Informatics*, 27: 205-216.

Ling, R. and Thrane, K. 2001. '*It actually separates us a little bit, but I think that is an advantage': The management of electronic media in Norwegian households*. Paper for the conference 'e-Usages', Paris, 12-14th June.

Mascheroni, Giovanna 2014. "Parenting the mobile internet in Italian households: Parents' and children's discourses." *Journal of Children and Media* 8, no. 4: 440-456.

Mascheroni, Giovanna and Haddon, Leslie. 2015. "Children, risks and the mobile internet." In *Encyclopedia of mobile phone behavior* edited by Y.Zheng, 1409-1418. Hershey, PA: IGI Global. http://eprints.lse.ac.uk/66930/

Mascheroni, Giovanna and Ólafsson, Kjaetann. 2014. *Net Children Go Mobile: risks and opportunities. Second Edition*. Milano: Educatt. http://netchildrengomobile.eu/reports/

Mwithia, Jesica. 2016. *Domesticating the mobile phone in Kibera: How Nairobi's poor are integrating the mobile phone into their everyday lives*, PhD diss., University of Technology, Sydney, Australia.

Pavez-Andonaegui Maria Isabel. 2014. *The Latinas' internet: Meanings and practices in the everyday lives of disadvantaged migrant women in London*. PhD diss., London School of Economics, London, UK.

Pierson, Jo. 2006. "Domestication at work in small businesses." In *Domestication of media and technologies* edited by T. Berker, M. Hartmann, Y. Punie and K. Ward, 205-26. Maidenhead: Open University Press.

Prensky, M. 2001. Digital natives, digital immigrants. *On the Horizon*, 9, no.5.

Schofield-Clarke, Lynn. 2014. "Mobile media in the emotional and moral economies of the household." In *The Routledge companion to mobile media,* edited by G. Goggin and L. Hjorth, 320-332. Abingdon: Routledge

Scifo, Barbara. 2005. "The domestication of camera-phone and MMS communication. The early experiences of young Italians." In *A sense of place. The global and the local in mobile communication,* edited by K. Nyíri, 363-374. Vienna: Passagen Verlag.

Selwyn, Neil. 2009. "The digital native – Myth and reality". *Aslib Proceedings: New Information Perspective*, 61, no. 4: 64-378.

Silverstone, Roger. 2005 "Domesticating domestication. Reflections on the life of concept." In *Domestication of media and technologies,* edited by T. Berker, M. Hartmann, Y. Punie and K. Ward, 229-248. Maidenhead: Open University Press.

Silverstone, Roger, Hirsch, Eric, and Morley, David. 1992. "Information and communication technologies and the moral economy of the household." In *Consuming technologies,* edited by R. Silverstone and E. Hirsch, 15-31. Routledge, London.

Stephen, C., Stevenson, O. & Adey, C. 2013. "Young children engaging with technologies at home: The influence of family context." *Journal of Early Childhood Research,* 11, no.2: 149-164.

Sørensen, Ingvil Kvale 2014. *Domesticating the Disney tween machine. Norwegian tweens enacting age and everyday life*. PhD diss., University of Trondheim, Trondheim, Norway

Stern, Susan. 2008. "Questioning the generational divide: Technological exoticism and adult constructions of online youth identity". In *Youth, identity and digital media,* edited by D. Buckingham, 95-118. Cambridge, MIT Press..

Vuojärvi, Hanna., Isomäki, Hannakaisa, & Hynes, Deirdre. 2010. "Domestication of a laptop on a wireless university campus: A case study." *Australasian Journal of Educational Technology*, 26, no.2: 250-267.

Wong, A. 2010. "Social trust as seed: Cases of early mobile phone domestication among the urban youth of Bangladesh." In *Trust and technology in a ubiquitous modern environment: Theoretical and methodological perspectives*, edited by D. Latusek & A. Gerbasi, 193-208. Hershey, PA: IGI Global.

Yoon, K. 2003. "Retraditionalizing the mobile: Young people's sociality and mobile phone use in Seoul, South Korea. "*European Journal of Cultural Studies*, 6, no.3: 327-43.

Zaman, B., Nouwen, M., Vanattenhoven, J., de Ferrerre, E., and Van Looy, J. 2016. "A qualitative inquiry into the contextualized parental mediation practices of young children's digital media use at home." *Journal of Broadcasting and Electronic Media*, 60, no.1: 11-22.

Endnotes

1. Here the earlier British formulation of domestication is discussed, but there were also considerable Norwegian contributions to the development of the concept at this early stage (e.g. Lie, M & Sørensen, K. (eds.) (1996). *Making technologies our own? Domesticating technology into everyday life*. Oslo: Scandinavian University Press).

2. Haddon, L. & Vincent, J. (eds.) (2014). *European children's and their carers' understanding of use, risks and safety issues relating to convergent mobile media*. Report D4.1. Milano: Unicatt. http://eprints.lse.ac.uk/60147/ discussed the European qualitative research. Several chapters reporting different aspects of this work can be found in Vincent, J. & Haddon, L. (eds) (2018). *Smartphone cultures*, Abingdon: Routledge.